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ABSTRACT

This paper describes and evaluates Grand Academy, an alternative junior high school set up in New York City by a local district and a nonprofit community-based organization to meet the needs of students who have twice failed to meet Board of Education promotioal standards in the seventh grade. The instructional program, provided by the school district, offers small class size, specially trained teachers, a variety of multimedia materials, and instructional management systems. Career education is infused into the regular curriculum. Intensive support services, vocational services, and afterschool programs are offered by the community organization. In general, findings suggest that the alternative school improves student's academic performance and behavior. They become motivated to attend school and project high aspirations for the future. But, they continue to lag so far behind academically that when they move out of the alternative school environment they are still unable to function effectively in the basic skills area. For most of these students, a strong vocational preparation program with a view toward termination of traditional schooling and entrance into the world of work may be the soundest plan. However, the success of the Grand Academy alternative demonstrates the importance of intervention at the junior high level in order to prevent dropping out. (KH)

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# ALTERNATIVE EDUCATIONAL MODEL FOR JUNIOR HIGH SCHOOL STUDENTS NOT MEETING PROMOTIONAL STANDARDS

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## Introduction

Under decentralization, the Chancellor of the New York City Public Schools has the power and duty to promulgate minimum educational standards and curriculum requirements for all schools and programs throughout the city district. In June 1980, a citywide Promotional Policy for students in grades K to 9 was promulgated which established a citywide standard curriculum and required end-of-year performance standards for all grades. Promotional "gates" were established in grades 4 and 7 with mandated promotional standards. The Promotional Policy seeks to ensure that all students will gain satisfactory mastery of the minimum skill and content essentials of each grade before being promoted to the next. The grade placement of students is based on attainment of the performance standards, measured by all available data, including standardized tests, criterion-referenced tests, diagnostic tests, teacher and principal judgment, and other formal and informal evidences of growth.

The citywide Promotional Gates Program serves the special instructional needs of fourth and seventh grade students who do not meet the mandated standards. The Gates program retains those students in their grades and provides remediation to raise their achievement to the level required to progress to the next grade. A Gates Extension program serves the needs of students who have been retained in the Gates program and who do not meet the promotional standards a second time. The Gates Extension program places students in the fifth and eighth grades, and provides remediation within the context of the higher grade curricula. Thus Gates Extension students are more able to advance at rates appropriate to their age and maturity levels.

One of the 32 community school districts in New York City sought to develop an effective model of alternative education to meet the unique needs of the Gates Extension population. This paper seeks to describe the model, develop a profile of the students and their needs, and present findings to date for the junior high school component of the Gates Extension program. In addition, the paper seeks to establish a baseline for a longitudinal research and evaluation effort.

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## Objectives

Through provision of integrated instructional and supportive services, the alternative educational program will result in improved attendance, academic performance and behavior for 90 eighth and ninth grade students who have traditionally experienced school failure. Through the provision of comprehensive vocational services, the alternative program will also result in increased understanding of school/work connections, awareness of career opportunities and greater employability skills for participating students.

## Perspectives

The alternative education program was developed in response to the Chancellor's Regulations on Promotional Policy. The program was established to meet the special needs of younsters who have twice failed to meet Board of Education promotional standards in the seventh grade. In addition to low academic performance resulting in their being retained twice, many of the students have school histories marked by chronic truancy and other negative behaviors. Many of the students have serious family problems which interfere with successful school performance. The intent of the alternative program is to create a favorable, success-oriented environment for these youngsters who have not succeeded in the traditional school milieu. The program seeks to: increase student attendance; improve academic performance; identify personal and family problems interfering with school performance; provide direct intervention and/or linkages to service for those problems; and provide comprehensive vocational services.

The alternative education program was developed in cooperation with a non-profit community based organization (CBO), and demonstrates an innovative model of collaboration in service provision. Community School District 1 and Grand Street Settlement have combined efforts and resources to develop the only public school/CBO collaborative project of this kind in New York City. Grand Street Settlement has a 70 year history of service to Manhattan's Lower East Side. The settlement's board of directors has dedicated its emphasis in recent years to addressing the problems of school failure and youth unemployment. Collaboration has been facilitated by a mutual sense of purpose and a shared commitment to address the needs of students at high risk of academic failure and dropout.

The alternative education program is called the Grand Academy. The program has been cited as exemplary by the Educational Priorities Panel, a panel made up of 24 civic organizations that monitors the New York City Board of Education. In addition, Grand Academy has been identified as a model of alternative education and public school/CBO collaboration by such civic groups as United Parents Association, Citizens Committee for Children and Public Education Association.

## Program Description

The alternative program is housed at Grand Street Settlement in order to provide a new environment, free from association with previous school failure. The program capitalizes on the settlement's resources and the positive relationship it enjoys with the community. The program offers intensive services to address the complex problems that contribute to school failure. Through this joint venture, enriched instructional services are provided by Community School District 1 personnel, while supportive services, vocational services and afterschool programs are provided by Grand Street Settlement personnel. The instructional, supportive service and vocational components of the program function in an intergrated and complementary way. Formal and informal communication structures have been developed to enhance collaboration between District 1 and Grand Street personnel, including shared office space, administrative team meetings, joint orientation and training faculty and staff meetings and ongoing communication.

The instructional program provides Gates Extension students with small class size (N=15), specially trained teachers, a variety of multi-media materials and instuctional management systems. In addition to 15 periods per week of communication arts instruction, students receive instruction in mathematics, computer literacy, social studies, science, industrial arts and physical education. Career exploration information is infused into the regular curriculum using locally developed career education materials and activities. The instructional component is staffed by eight teachers.

Supportive services provided by the CBO include: extensive outreach and home visits to students at risk of truancy and/or dropout; individual and family counseling for those problems which interfere with school performance; and a complete afterschool program (recreational, cultural, educational and vocational) which supplements the instructional day program. Supportive services are provided by three social workers, a part-time psychologist and afterschool personnel. Supplemental supportive services are provided by graduate social work interns from Fordham University.

Vocational services are provided in four phases across the two-year Gates Extension program. These services include instruction in job readiness skills and sheltered or "mini" business experience during the 8th grade program, followed by summer employment and transition to the 9th grade program of continued instruction and enrichment through work and mentoring experience. Vocational services are provided by one job developer and one vocational counselor.

One District 1 supervisor and one Grand Street supervisor work together to direct the Grand Academy program.

During the first two years of the alternative program, Grand Academy served only eighth grade Gates Extension students. Students who completed the eighth grade at Grand Academy were permitted to enroll in ninth grade at the local high school. A follow-up project provided continued support for these at risk students, and simultaneously enabled district staff to acquire valuable information about the continuing needs of the Gates Extension population. The follow-up project provided a social worker who continued to meet with students during their first year of high school. Virtually all of the students remained in high school during the 1983-84 school year. Considering the troubled school histories of these students, and the citywide dropout rate of approximately 42%, this was a remarkable finding. Apparently, the values learned at Grand Academy - of coming to school and staying in school - have remained. However, the students were found to still lack the basic skills required to succeed academically. The follow-up project indicated that the high school program did not offer the variety or felexibility in its programmatic design to motivate these youngsters or to address their basic skills deficiencies. Because of these findings, the Grand Academy program was expanded this year to provide a two-year program (grades 8 and 9), so that students would have an additional year to more firmly establish their newly acquired skills and habits. The expansion to a two-year program will also provide staff with increased opportunity to identify appropriate educational placements for students in alternative high school programs which are more suited to their needs.

## Descriptive Profile of Grand Academy Students

A study was conducted in spring 1984 in an effort to describe the student population of Grand Academy, identify their educational and psychological needs, and analyze the effectiveness of the alternative model in meeting the students' needs.[1] Approximately 20% of the students in the current 8th grade Gates Extension cohort were selcted to receive psychological evaluations, based on evidence of some confusion, problem or difficulty in functioning at the school. A wide variety of problems were reflected in

the sample, e.g., behavior problems, attendance problems, academic difficulties and problems in interpersonal functioning. The sample was composed of the highest priority cases, but is reflective of the breadth of problems experienced by Grand Academy students. The representativeness of the sample selected for clinical evaluation was confirmed through regular observation of and consultation with virtually 100% of the cohort. In addition, the face validity of the findings was confirmed by project staff and supervisors.

Tepp's analysis of the data suggests that students may be classified into three groups based on the primary cause of previous school failure: discrepant learners, slow learners and those with primary emotional difficulties. Approximately two-thirds of the sample exhibited a significant discrepancy between their verbal and performance IQ score ($X_{diff}$ = 28.6 points). Performance IQ scores were generally in the 80-100 range, while verbal IQ scores were generally in the 60-80 range. Discrepant learners demonstrated relative cognitive strengths in visual-spatial skills, visual motor skills and non-verbal abstract concept formation. Relative cognitive deficits were demonstrated in receptive and expressive language, vocabulary, math skills, general information and verbal abstract concept formation. All of the discrepant learners evidenced at least mild to moderate emotional problems; half evidenced very significant emotional problems. Such problems are likely to be due, in part, to the internal tensions resulting from their discrepant cognitive functioning. These stresses are compounded by socio-economic difficulties and familial discord.

Approximately 26% of the students in the sample were found to be slow learners. The slow learners demonstrated an average overall IQ score of 65, with no significant difference between verbal and performance scores. While all students in this group evidenced emotional problems of sufficient intensity to warrant counseling, the need for supportive service is secondary to the need for appropriate educational placement and service.

The remaining 7% of the sample evidenced normal or clear potential for normal intellectual functioning. This group demonstrated primary emotional difficulties which were manifested in academic as well as behavioral indicators. Typical issues for these students include problems with identify formation, sexual concerns, family conflict or family enmeshment.

Tepp concluded that a majority of the students who are repeat holdovers fail primarily because of cognitive liabilities in the verbal realm. A significant number of students require supportive and/or counseling services to supplement an individualized educational program which appropriately places students and is sensitive to the nature of their cognitive functioning.

[1] The descriptive profile utilizes findings reported by Grand Academy's clinical and consulting psychologist, Alan V. Tepp, Ph.D., in Grand Academy: Descriptive findings and implications for educational and counseling staff, July 1934 (unpublished).

Data Sources

The data source is the population of 48 8th grade and 42 9th grade Gates Extension students enrolled in the current academic year (1984-85). Performance indicators include pre and post attendance rates, achievement data from the California Achievement Test in Reading and the New York City Mathematics Test (a customized edition of the Stanford Diagnostic Mathematics Test), attitude data from the School Attitude Measure, as well as observation and interview data. Comparisons are presented for the 1983-84 pre-program year for the 8th grade cohort, and for the 1982-83 pre-program and 1983-84 initial program year for the 9th grade cohort. In addition, comparisons are made with citywide Gates Extension data where possible.

Results

Results are reported for two groups, the current 9th grade Gates Extension cohort and the current 8th grade Gates Extension cohort. The 9th grade cohort is presently in the second year of the alternative program, and is, necessarily, a more homogeneous group. The 8th grade cohort is presently in their initial program year, and is more heterogeneous.

(1) Ninth Grade Gates Extension Cohort

In spring 1982, approximately 200 7th grade students in Community School District 1 failed to meet the Chancellor's promotional criteria. These students were retained in a 7th grade Gates program in their zoned junior high school. The 7th grade Gates program served students in reduced-size classes (N=20), wherein they received 15-17 periods of instruction in communication arts and 7-10 periods of instruction in mathematics each week. No supportive services were provided in the Gates program beyond those limited services available within the schools from the regular guidance counselors. Approximately 71% of the students retained in the 7th grade Gates program improved their skills sufficiently to meet promotional criteria at the end of the 1982-83 school year. Such students were promoted to 8th grade in their zoned junior high school.

Twenty-nine percent (N=58) of the 1982-83 7th grade Gates population still failed to meet the promotional criteria in spring 1983. These "double holdovers" were given the option to enroll in the alternative program housed at Grand Street Settlement. One hundred percent of the students selected this option and registered as 8th grade Gates Extension students in 1983-84. The 1983-84 Gates Extension program served the double holdovers by providing an enriched instructional, supportive service and vocational program. Students entering the Grand Academy in fall 1983 were those who had made the smallest gains in achievement while in the Gates program. In addition, these students had demonstrated declining attendance rates during the 1982-83 Gates program. By the end of the 1983-84 school year, 28% of the Gates Extension students had improved their academic skills, attendance and other school behaviors sufficiently to permit them to enroll in the local zoned high school for the 1984-85 school year. Forty-two students, however, were still judged to be in need of continued support.

Community School District 1 and Grand Street Settlement thus redesigned the alternative program in order to address the continuing needs of the 42 youngsters for whom a single year of intensive service was not sufficient to enable them to re-enter and successfully negotiate the mainstream. In fall 1984, a ninth grade component was added to the alternative program. The ninth grade component provides continued instructional and supportive services in order to more firmly establish the students' new skills, attitudes and behaviors. The new component also adds enriched vocational services, including supervised work experience and mentoring activities, in order to better prepare these high risk students for their next academic or vocational step.

The data in Table I present a profile of the most recent reading and mathematics achievement for the current 9th grade Gates Extension cohort. These data constitute baseline data, as the 9th grade program component is currently in the first year of implementation. Achievement data are reported in normal curve equivalent units (NCEs).

Table I

1984-85 Ninth Grade Gates Extension Cohort
Summary of Reading and Mathematics Achievement

| | Spring 1982 | | | Spring 1983 | | | | Spring 1982 | | | Spring 1984 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | $\bar{X}$ | SD | $\bar{X}$ | SD | t | p | N | $\bar{X}$ | SD | $\bar{X}$ | SD | t | p |
| Reading (CAT) | | | | | | | | | | | | | | |
| Vocabulary | 32 | 25.50 | 8.29 | 31.97 | 8.40 | -3.097 | *** | 30 | 25.53 | 8.18 | 30.37 | 10.66 | -1.755 | * |
| Comprehension | 32 | 29.97 | 9.97 | 32.44 | 6.84 | -1.171 | ns | 30 | 28.93 | 10.55 | 32.20 | 10.06 | -1.370 | ns |
| Total Reading | 32 | 26.69 | 8.28 | 31.31 | 4.97 | -2.871 | ** | 30 | 26.03 | 8.76 | 30.83 | 7.41 | -2.367 | * |
| Math (NYCMT) | | | | | | | | | | | | | | |
| Numeration | 23 | 27.00 | 10.10 | 37.04 | 7.91 | -4.781 | *** | 21 | 26.10 | 9.39 | 19.86 | 11.55 | 2.455 | ** |
| Computation | 23 | 29.48 | 11.98 | 35.78 | 12.49 | -2.611 | * | 21 | 26.90 | 12.35 | 22.90 | 14.03 | 1.384 | ns |
| Applications | 23 | 24.17 | 9.76 | 27.17 | 11.20 | -1.439 | ns | 21 | 21.38 | 8.75 | 17.38 | 10.92 | 1.378 | ns |
| Total Math | 23 | 24.17 | 9.87 | 34.87 | 9.28 | -6.013 | *** | 21 | 21.33 | 9.64 | 18.38 | 10.92 | 1.371 | ns |

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

The data in Table I indicate that significant gains were made in Total Reading and Total Math performance during students' 7th grade Gates program in 1982-83, with the average Total Reading score increasing from 26.69 to 31.31 NCEs and the average Total Math score increasing from 24.17 to 34.87 NCEs. Significant gains were also demonstrated for the Vocabulary subtest of the CAT and for the Numeration and Computation subtests of the NYCMT. Non-significant gains were obtained on the CAT-Comprehension subtest and the NYCMT-Applications subtest.

The data in Table I indicate that students demonstrated sustained gains from 1982-84 in Vocabulary and Total Reading on the CAT which were significant, while gains in Comprehension did not reach significance. In the area of mathematics, there was a non-significant decline in average achievement in Total Math, Computation and Applications, while the decline in Numeration was significant. The decline in mathematics parallels a systematic decline at the eighth grade level in 1984 within Community School District 1 and New York City as a whole. The decline may also be due, in part, to a decrease in instructional time in math in the 8th grade Gates Extension program, which offered five periods of math per week compared to seven to ten periods per week in the 7th grade Gates program in 1982-83.

Additional evidence of the Grand Academy's effectiveness in increasing students' achievement in reading is provided in Table II, which presents reading achievement data by category of performance for the 1982-83 and 1983-84 years.

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Table II

1984-85 Ninth Grade Gates Extension Cohort
Percent of Students by Category of Reading Performance

| Category | Gates 1982-1983 | Gates Extension 1983-1984 |
|---|---|---|
| At or above grade level | 0 | 8 |
| .1-1 year below grade level | 0 | 14 |
| 1.1-3 years below grade level | 63 | 60 |
| <3 years below grade level | 37 | 18 |

The data in Table II indicate that the percent of students in the lowest category of reading achievement was halved during their first year in the Grand Academy program. Twenty-two percent of the students increased their achievement to levels above minimum competency.

While students' average achievement in reading and mathematics increased significantly during their 7th grade Gates program at the zoned junior high schools, their attendance declined significantly and their lateness increased. Table II presents attendance data for the current 9th grade Gates Extension cohort. Attendance data are reported in percentages, with Attendance Rate equal to the percentage of days present out of total days on register. Lateness Rate refers to the percentage of days late out of total days present.

Table III

1984-85 Ninth Grade Gates Extension Cohort
Summary of Attendance Data

| | Gates Program | | | Gates Extension Program | | |
|---|---|---|---|---|---|---|
| | N | Sp. '82 $\bar{X}$ | Sp. '83 $\bar{X}$ | N | Sp. '83 $\bar{X}$ | Sp. '84 $\bar{X}$ |
| Attendance Rate | 19 | .85 | .80 | 28 | .82 | .87 |
| Lateness Rate | 18 | .09 | .16 | 27 | .17 | .23 |

The data in Table III indicate that attendance declined substantially during the Gates year, from 85% to 80%. The spring 1983 Attendance Rate of .80 equals the rate found citywide among the 7th grade Gates population. Lateness among students in the Gates program increased substantially from 9% to 16%. These findings may be due, in part, to the fact that the 7th grade Gates program in the zoned junior high schools offered no supportive services targeted to this high risk population.

These changes in attendance and punctuality during the Gates year reflected a growing disengagement from school and signalled an increasing tendency for truancy and dropout. The Grand Academy's supportive service component addressed this problem in the 1983-84 year and demonstrated success in reversing the declining attendance pattern. Average attendance increased significantly during the 8th grade Gates Extension

program, from 82% to 87%. This rate compares favorably to District 1's average attendance rate for junior high school students ($\bar{X}$=81%), and is attributed to the strong supprtive service component which includes outreach, retrieval, home visits and child/family interventions. The non-significant increase in Lateness Rate was an anticipated finding. Students who were previously not attending school regularly improved their attendance, but tended to arrive at 9:00 a.m. rather than at 8:40 a.m.

Additional evidence of Grand Academy's effectiveness in improving students' attendance is provided in Table IV, which presents attendance data by category of average daily attendance for the Gates and Gates Extension years.

Table IV

1984-85 Ninth Grade Gates Extension Cohort
Percent of Students in Categories of Average Daily Attendance

| Category | Gates 1982-1983 | Gates Extension 1983-1984 |
|---|---|---|
| 80 - 100% ADA | 49.3 | 74.3 |
| 60 - 79% ADA | 30.9 | 17.1 |
| < 60% ADA | 19.8 | 8.6 |

The data in Table IV indicate that more than half of the students attended school less than 80% of the time during their 7th grade Gates program. During their first year in the Gates Extension program at Grand Academy, the percent of students attending school less than 80% of the time was reduced by half; the percent of students demonstrating between 80-100% ADA increased from 49.3% to 74.3%. These data provide evidence that the Grand Academy program was successful in meeting its objective to improve student attendance.

Regression analyses were performed to study the correlation of reading gains with other predictor variables. Independent variables included: number of elementary schools attended, limited English proficiency, resource room (i.e., learning disabilities classification), sex, attendance rate and lateness rate.

Table V presents the summary of the regression on the 1982-83 gains in CAT-Total Reading, when the 9th grade cohort was in a 7th grade Gates program in their zoned junior high schools. Table VI presents the regression summary on the 1983-84 gains in CAT-Total Reading, when the 9th grade cohort was in the 8th grade Gates Extension program at Grand Academy.

## Table V

### 1984-85 Ninth Grade Gates Extension Cohort
### Final Summary of Regression on 1982-83 Gains, CAT-Total Reading

| | |
|---|---|
| Multiple R | 0.5283 |
| Multiple R squared | 0.2793 |
| Adjusted R squared | 0.2013 |
| Std. Error of Est. | 8.1426 |
| Constant | 6.8583 |

| Analysis of Variance | DF | Sum of Squares | Mean Square | F Ratio | Prob. Level |
|---|---|---|---|---|---|
| Regression | 4 | 950.517 | 237.629 | 3.584 | 0.014 |
| Residual | 37 | 2453.144 | 66.301 | | |
| Adj. Total | 41 | 3403.661 | | | |

| Step | Num vars in | Mult R | Mult R Sq. | Change in RSq | Variable entered (+ shows deleted) | B, raw coefficient | Stand error of B | BETA, stand. coefficient | Final F to delete | F when entered or deleted | Simple cor. with dep. | Partial Cor. in Final step |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0.285 | 0.070 | 0.070 | SCHOOLS.ATTENDED | 1.5818 | 0.6844 | 0.3275 | 5.236 | 5.012 | 0.2648 | 0.3527 |
| 2 | 2 | 0.408 | 0.184 | 0.094 | RES.RM | 6.0377 | 2.6372 | 0.3292 | 5.242 | 4.401 | 0.2508 | 0.3528 |
| 3 | 3 | 0.487 | 0.247 | 0.082 | SEX | -5.1078 | 2.5336 | -0.2834 | 4.038 | 4.160 | -0.2400 | -0.3144 |
| 4 | 4 | 0.528 | 0.278 | 0.032 | LEP | -4.6635 | 3.6135 | -0.1814 | 1.667 | 1.667 | -0.2315 | -0.2076 |

Regression Equation:

CATT.8283 (Pred) = 1.58898 SCHOOLS.ATTENDED + -6.03774 RES.RM + -5.10784 SEX + -4.66548 LEP + 8.55835

## Table VI

### 1984-85 Ninth Grade Gates Extension Cohort
### Final Summary of Regression on 1983-84 Gains, CAT-Total Reading

| | |
|---|---|
| Multiple R | 0.6004 |
| Multiple R squared | 0.3605 |
| Adjusted R squared | 0.2913 |
| Std. Error of Est. | 6.9325 |
| Constant | 5.8918 |

| Analysis of Variance | DF | Sum of Squares | Mean Square | F Ratio | Prob. Level |
|---|---|---|---|---|---|
| Regression | 4 | 1002.334 | 250.583 | 5.214 | 0.002 |
| Residual | 37 | 1778.215 | 48.060 | | |
| Adj. Total | 41 | 2780.548 | | | |

| Step | Num vars in | Mult R | Mult R Sq. | Change in RSq | Variable entered (+ shows deleted) | B, raw coefficient | Stand error of B | BETA, stand. coefficient | Final F to delete | F when entered or deleted | Simple cor. with dep. | Partial Cor. in Final step |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0.431 | 0.185 | 0.185 | SCHOOLS.ATTENDED | -2.6790 | 0.6303 | -0.6087 | 18.073 | 5.103 | -0.4306 | -0.5808 |
| 2 | 2 | 0.513 | 0.263 | 0.078 | RES.RM | -5.4313 | 2.2573 | -0.3276 | 5.780 | 4.132 | 0.1820 | -0.3678 |
| 3 | 3 | 0.576 | 0.332 | 0.068 | LATE.RATE.83 | -24.4605 | 10.4448 | -0.3435 | 5.484 | 3.888 | -0.1660 | -0.3583 |
| 4 | 4 | 0.600 | 0.360 | 0.028 | LATE.RATE.82 | 15.8788 | 12.3268 | 0.1852 | 1.658 | 1.658 | 0.1136 | 0.2092 |

Regression Equation:

CATT.8384 (Pred) = -2.67904 SCHOOLS.ATTENDED + 5.4313 RES.RM + -24.46046 LATE.RATE.83 + 15.87878 LATE.RATE.82 + 5.8918

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The data in Table V show that $R^2$=.2793, indicating that approximately 28% of the variation in the 1982-83 gains in CAT-Total Reading is explained by the joint operation of: number of elementary schools attended, resource room status, sex and limited English proficiency. The probability of obtaining an overall F ratio equal or greater than 3.584 is less than .001. We may therefore conclude that it is unlikely that the sample was drawn from a population in which multiple R=0.

When entered first into the regression equation, the number of elementary schools attended explains 7% of the variance. After entering the number of elementary schools attended, resource room contributes an additional 9.4% of the variance. After the first two variables are entered, the addition of sex accounts for 8.2% of the variation in gains on CAT. Adding limited English proficiency last accounts for an additional contribution to $R^2$ of 3.2%. In comparing the F value associated with each regression coefficient (B) with the critical F for 1 and 37 df, it was found that the B's for schools attended, resource room and sex were significant at p=.05, while the B for limited English proficiency was not significant.

The data in Table VI show that $R^2$=.3605, indicating that approximately 36% of the variation in the 1983-84 gains in CAT-Total Reading is may be explained by the joint operation of: number of elementary schools attended, resource room status, 1982 lateness rate and 1983 lateness rate. The probability of obtaining an overall F ratio equal or greater than 5.214 is less than .002. We may therefore conclude that it is extremely unlikely that the sample was drawn from a population in which multiple R=0.

When entered first into the equation, the number of elementary schools attended contributes .185 to the proportion of explained variance. After entering the number of elementary schools attended, resource room contributes an additional 7.8% to the variance. After the first two variables are entered, 1983 lateness rate adds 6.8% to the proportion of variance accounted for; 1982 lateness rate, entered last, accounts for an additional contribution to $R^2$ of 2.9%. In comparing the F value associated with each regression coefficient (B) with the critical F for 1 and 37 df, it was found that the B's for schools attended and resource room were significant at p=.05, while the B's for 1983 lateness rate and 1982 lateness rate were not significant.

Regression analyses were also performed to study the correlation of mathematics gains with the same predictors and with gains in CAT-Total Reading. Table VII presents the summary of the regression on 1982-83 gains in NYCMT-Total Math, when the current 9th grade Gates Extension cohort was in the 7th grade Gates program. Table VIII presents the summary of the regression on 1982-84 gains in NYCMT-Total Math, i.e., the regression on the gains sustained across the two year period for the current 9th grade Gates Extension cohort.

The data in Table VII show that $R^2$=.8527, indicating that approximately 85% of the variation in the 1982-83 gains in NYCMT-Total Math may be explained by the joint operation of 1982 attendance rate, resource room, 1982-83 gains in CAT-Total Reading, sex, 1982 lateness rate and limited English proficiency. The probability of obtaining an overall F ratio equal or greater than 33.769 is less than .001. We may therefore conclude that the sample was drawn from a population in which multiple R=0.

When entered first into the regression equation, 1982 attendance rate accounts for the largest proportion of variance, $R^2$=.354. After entering 1982 attendance rate, resource room contributes the next largest proportion of variance, $R^2$ change = .237. Following the first two variables, the 1982-83 gains in CAT-Total Reading add an additional 14.8% to the variance accounted for. The addition of sex as the fourth variable in the equation produces an $R^2$ change = .043. Entered fifth, 1982 lateness rate explains an additional 6.2% of the variance. When entered last, limited English proficiency contributes an $R^2$ change of .008.

## Table VII

### 1984-85 Ninth Grade Gates Extension Cohort
### Final Summary of Regression on 1982-83 Gains, NYCMT-Total Math

| | |
|---|---|
| Multiple R | 0.9234 |
| Multiple R squared | 0.8527 |
| Adjusted R squared | 0.8275 |
| Std. Error of Est. | 3.5434 |
| Constant | -37.4387 |

| Analysis of Variance | DF | Sum of Squares | Mean Square | F Ratio | Prob. Level |
|---|---|---|---|---|---|
| Regression | 6 | 2343.989 | 423.998 | 33.768 | 0.000 |
| Residual | 35 | 439.450 | 12.556 | | |
| Adj. Total | 41 | 2883.439 | | | |

| Step | Num vars now in | Mult R | Mult R Sq. | Change in RSq | Variable entered (* shows deleted) | B, raw coef-ficient | Stand error of B | BETA, Stand. coef-ficient | Final F to delete | F when entered or deleted | Simple cor. with dep. | Partial cor. in Final step |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0.595 | 0.354 | 0.354 | ATT.RATE.82 | 30.1487 | 4.5410 | 0.7971 | 116.762 | 21.825 | 0.5850 | 0.9774 |
| 2 | 2 | 0.788 | 0.591 | 0.237 | RES.RM | 8.3880 | 1.1718 | 0.5467 | 64.210 | 22.635 | 0.5044 | 0.8045 |
| 3 | 3 | 0.860 | 0.739 | 0.148 | CATT.8283 | 0.2497 | 0.0689 | 0.2667 | 13.135 | 21.812 | 0.1748 | 0.5224 |
| 4 | 4 | 0.885 | 0.783 | 0.043 | SEX | -5.0645 | 1.2473 | -0.3001 | 16.487 | 7.355 | -0.1320 | -0.5639 |
| 5 | 5 | 0.919 | 0.845 | 0.062 | LATE.RATE.82 | 24.8803 | 6.0851 | 0.2927 | 16.369 | 14.447 | 0.0175 | 0.5345 |
| 6 | 6 | 0.923 | 0.853 | 0.008 | LEP | -2.2487 | 1.6513 | -0.0934 | 1.854 | 1.854 | -0.1208 | -0.2243 |

Regression Equation:

SDMTT.8283 (pred) = 30.1487 ATT.RATE.82 + 8.38798 RES.RM + .24973 CATT.8283 + -5.[illegible]448 SEX

+ 24.88034 LATE.RATE.82 + -2.24871 LEP + -37.4387

In comparing the F value associated with each regression coefficient (B) with the critical F for 1 and 35 df, it was found that the B's for 1982 attendance rate, resource room, 1982-83 gains in CAT- Total Reading, sex and 1982 lateness rate were significant at p .01. The B for limited English proficiency was not significant.

## Table VIII

### 1984-85 Ninth Grade Gates Extension Cohort
### Final Summary of Regression on 1982-84 Gains, NYCMT-Total Math

| | |
|---|---|
| Multiple R | 0.6081 |
| Multiple R squared | 0.3698 |
| Adjusted R squared | 0.3375 |
| Std. Error of Est. | 8.0309 |
| Constant | -40.5743 |

| Analysis of Variance | DF | Sum of Squares | Mean Square | F Ratio | Prob. Level |
|---|---|---|---|---|---|
| Regression | 2 | 1475.924 | 737.962 | 11.442 | 0.000 |
| Residual | 39 | 2515.328 | 64.496 | | |
| Adj. Total | 41 | 3991.252 | | | |

| Step | Num vars now in | Mult R | Mult R Sq. | Change in RSq | Variable entered (* shows deleted) | B, raw coef-ficient | Stand error of B | BETA, stand. coef-ficient | Final F to delete | F when entered or deleted | Simple cor. with dep. | Partial Cor. in Final step |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0.484 | 0.234 | 0.234 | RES.RM | 7.9193 | 2.3813 | 0.3988 | 9.340 | 12.235 | 0.4840 | 0.4386 |
| 2 | 2 | 0.608 | 0.370 | 0.136 | ATT.RATE.84 | 39.3421 | 13.5833 | 0.3779 | 8.389 | 8.389 | 0.4678 | 0.4207 |

Regression Equation:

SDMTT.8284 (pred) = 7.91937 RES.RM + 39.3421 ATT.RATE.84 + -40.5743



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The data in Table VIII show that $R^2$=.3698, indicating that approximately 40% of the variation in the 1982-84 gains in NYCMT-Total Math may be explained by the joint operation of resource room and 1984 attendance rate. The probability of obtaining an overall F ratio equal or greater than 11.442 is less than .001. We may therefore conclude that it is unlikely that the sample was drawn from a population in which multiple R=0.

The largest proportion of variance accounted for when entered first into the equation is resource room, $R^2$=.234. When 1984 attendance rate is entered next, it increases the proportion of explained variance by .136. In comparing the F value associated with each regression coefficient (B) with the critical F for 1 and 39 df, it was found that the B's for both variables were significant at p less than .01.

The achievement and attendance data cited above provide information which enable us to more fully understand the 9th grade Gates Extension cohort. These data provide evidence that the Grand Academy program has demonstrated effectiveness in its initial efforts to address the needs among this high risk adolescent population. Without the alternative Gates Extension program, it would be expected that the attendance rates of these students would continue to decline. The Grand Academy program, however, has provided services which resulted in improved attendance and sustained gains in achievement.

(2) Eighth Grade Gates Extension Cohort

In spring 1983, approximately 175 seventh grade students failed to meet the Chancellor's promotional criteria. These students were retained in 1983-84 in a 7th grade Gates program in their zoned junior high schools. Forty-eight students (27%) still failed to meet the promotional criteria in spring 1984. These "double holdovers" were given an option to enroll in the alternative Gates Extension program housed at the Grand Street Settlement. All eligible students chose to the option to leave their zoned junior high school and participate in the Grand Academy program. It is now expected that these youngsters will remain at Grand Academy for a two-year program of intensive, individualized academic, supportive and vocational services.

Because these students are presently in their first year of the alternative program, standardized achievement test data is available for only the 1983-84 school year, i.e., their 7th grade Gates program in the zoned junior high school.

The data in Table IX present a profile of the most recent achievement and attendance data for the current 8th grade Gates Extension cohort. These data constitute a base-line for the first year of the 8th grade component of the Grand Academy. Achievement data are reported in normal curve equivalent units (NCEs). Attendance and lateness data are reported in percentages.

The data in Table IX indicate that significant gains were made in Total Reading and Total Math during the students' 7th grade Gates program in 1983-84, with the average Total Reading score increasing from 24.93 to 31.15 NCEs and the average Total Math score increasing from 20.69 to 28.52 NCEs. Significant gains were also demonstrated for all subtests on the NYCMT and for the Comprehension subtest on the CAT. A non-significant gain was obtained for the Vocabulary subtest on the CAT.

It is interesting to note that the mathematics achievement during the 7th grade Gates program was found to be lower for the present 8th grade cohort than for the present 9th grade cohort (compare Tables I and IX).

Table IX

1984-85 Eighth Grade Gates Extension Cohort
Summary of Achievement and Attendance Data

| | Spring 1983 | | | Spring 1984 | | | |
|---|---|---|---|---|---|---|---|
| | N | $\bar{X}$ | SD | $\bar{X}$ | SD | t | p |
| Reading (CAT) | | | | | | | |
| Vocabulary | 40 | 25.95 | 13.11 | 28.20 | 8.82 | -0.901 | ns |
| Comprehension | 40 | 27.48 | 10.53 | 34.73 | 8.93 | -3.460 | ** |
| Total Reading | 40 | 24.93 | 9.98 | 31.15 | 7.28 | -3.329 | ** |
| Mathematics (NYCMT) | | | | | | | |
| Numeration | 29 | 25.03 | 11.15 | 30.48 | 14.83 | -2.219 | * |
| Computation | 29 | 20.03 | 10.80 | 28.45 | 13.97 | -3.618 | ** |
| Applications | 29 | 19.00 | 12.45 | 23.79 | 14.42 | -1.948 | * |
| Total Math | 29 | 20.69 | 9.80 | 28.52 | 13.03 | -3.847 | *** |
| Attendance Rate | 37 | 0.79 | | 0.65 | | | |
| Lateness Rate | 37 | 0.16 | | 0.19 | | | |

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

While students' average achievement increased significantly during the 7th grade Gates program, their attendance rate declined significantly from .79 ADA to .65 ADA. Their average attendance rate at the end of the Gates program was far lower than that found among the current 9th grade Gates Extension cohort during their year in the Gates program (see Table III), and was far lower than the average rate of .80 ADA obtained citywide among the 7th grade Gates population. The decline of 17.7% in the average attendance rate during the Gates year signalled a rapidly increasing tendency toward truancy and dropout. Table IX shows that there was a corresponding increase in the average lateness rate during the year prior to entrance in the alternative Gates Extension program at Grand Academy.

During their first six months in the Grand Academy program, September 1984 to February 1985, these students demonstrated 74% average daily attendance. This is a 13.8% increase in ADA over the rate in the previous year while in the 7th grade Gates program at the zoned junior high schools. The increase in ADA to date represents a dramatic turnaround in a population which declined nearly 18% in attendance during the previous year. The expected trend would be a continued decline, reflecting a "giving up." Instead, the erosion in attendance was halted and a significant turnaround was accomplished.

The data analysis suggests that, in general, the present 8th grade cohort entered the Gates and Gates Extension programs with lower achievement scores, lower attendance rates and higher lateness rates than did the present 9th grade cohort. The 8th grade population thus presents an entering profile of relatively greater need.

In December 1984, the School Attitude Measure (Scott, Foresman and Co., 1980) was administered to all 8th grade Gates Extension students in New York City. The SAM is composed of five scales: Motivation for Schooling; Academic Self-Concept - Performance Based; Academic Self-Concept - Reference Based; Sense of Control over Performance; and Instructional Mastery.

Table X which follows presents summary data on the School Attitude Measure for 8th grade Gates Extension students at Grand Academy and citywide. Means are reported in national percentile ranks (NP).

Table X

1984-85 Eighth Grade Gates Extension Cohort
School Attitude Measure, December 1984

| Population | N | Motivation for Schooling | Academic Self-Concept: Perf. Based | Academic Self-Concept: Ref. Based | Sense of Control over Performance | Instructional Mastery |
|---|---|---|---|---|---|---|
| Grand Academy | 40 | 56 | 52 | 44 | 33 | 44 |
| New York City | 529 | 52 | 58 | 44 | 37 | 44 |

Both populations obtained average scale scores with the same interpretive ranges provided by the publisher. Students with scores in the 51st-83rd %ile range on the Motivation for Schooling scale are considered to respond positively about their past school experience, their willingness to work hard in school, and their desire to go further in school. Students with scores in the 51st-83rd %ile range on the Academic Self-Concept - Performance Based scale are considered to express adequate self-concept in their academic abilities and school performance. Scores in the 18th-50th %ile range on the Academic Self-Concept - Reference Based scale indicate that students think that others expect they will not do very well in school and rate them as having only fair academic ability. Scores in the 18th-50th %ile range on the Sense of Control over Performance scale indicate that students feel they have only weak control over their school life and accept only limited responsibility for the outcome of relevant school events. Students with scores in the 18th-50th %ile range on the Instructional Mastery scale report having some gaps in their instructional skills.

The highest average attitude score obtained by Grand Academy students was on the Motivation for Schooling scale ($\bar{X}$ = 56th %ile). Only four of the 22 districts in New York City with Gates Extension programs evidenced higher mean scores on the motivation scale. Grand Academy students appear to be motivated to attend school and value schooling. This observation is supported by evidence that in their first six months of enrollment in the Grand Academy alternative program (September 1984 to February 1985), this cohort demonstrated 74% average daily attendance, a substantial increase over their 65% ADA in the previous year.

The present investigation found that the scales of the School Attitude Measure were inter-correlated to a high extent. Table XI presents the double precision correlation matrix for the 8th grade Gates Extension cohort.

Table XI

Eighth Grade Gates Extension Cohort
Correlation Matrix for School Attitude Measure, December 1984
N = 42

| Attitude Scale | Motivation for Schooling | Academic Self-Concept: Perf. Based | Academic Self-Concept: Ref. Based | Sense of Control over Performance | Instructional Mastery |
|---|---|---|---|---|---|
| Motivation for Schooling | 1.00 | | | | |
| Academic S-C: Perf. Based | .43 | 1.00 | | | |
| Academic S-C: Ref. Based | .45 | .71 | 1.00 | | |
| Sense of Control over Perf. | .43 | .65 | .58 | 1.00 | |
| Instructional Mastery | .52 | .59 | .54 | .65 | 1.00 |

Students' scores on the two Academic Self-Concept scales were the most highly correlated ($r$ = .71). Scores on the Academic Self-Concept Performance Based scale and the Instructional Mastery scale both correlated .65 with scores on the Sense of Control over Performance scale. The remaining correlations ranged from $r$ = .43 to $r$ = .59. There are insufficient data at present to permit generalizing about the cohort. It would be useful to examine students' attitudes on a pre and post-program basis in future years.

Regression analyses were performed to study the correlation of 1983-84 reading gains with other predictor variables. Independent variables included: number of elementary schools attended, limited English proficiency, resource room, sex, attendance rate, lateness rate, and the five school attitude variables described above. Table XII presents the summary of the regression on the 1983-84 gains in CAT-Total Reading, when the 8th grade cohort was in a 7th grade Gates program in their zoned junior high school.

Table XII

1984-85 Eighth Grade Gates Extension Cohort
Final Summary of Regression on 1983-84 Gains, CAT-Total Reading

| | |
|---|---|
| Multiple-R | 0.401 |
| Multiple R-squared | 0.1614 |
| Adjusted R-squared | 0.1042 |
| Std. Error of Est. | 11.1937 |
| Constant | -0.9098 |

| Analysis of Variance | DF | Sum of Squares | Mean Square | F Ratio | Prob. Level |
|---|---|---|---|---|---|
| Regression | 3 | 1060.766 | 353.589 | 2.822 | 0.050 |
| Residual | 44 | 5513.178 | 125.299 | | |
| Adj. Total | 47 | 6573.944 | | | |

| Step | Num vars in | Mult R | Mult R Sq. | Change in RSq | Variable entered (* shows deleted) | B, raw coefficient | Stand error of B | BETA, stand. coefficient | Final F to delete | F when entered or deleted | Simple cor. with dep. | Partial Cor. in Final step |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0.254 | 0.064 | 0.064 | RES.RM | 7.0989 | 3.3138 | 0.2981 | 4.589 | 3.164 | 0.2537 | 0.3073 |
| 2 | 2 | 0.339 | 0.115 | 0.050 | ASC:PERF.BASED | -0.2341 | 0.1090 | -0.3310 | 4.612 | 2.568 | 0.2035 | -0.3080 |
| 3 | 3 | 0.402 | 0.161 | 0.047 | MOTIVATION | -0.1438 | 0.0920 | -0.2408 | 2.442 | 2.442 | -0.0753 | -0.2293 |

Regression Equation:

CATT.8384 (pred) = 7.09893 RES.RM + -.234125 ASC:PERF.BASED + -.143783 MOTIVATION + -.9098



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The data in Table XII show that $R^2$=.1614, indicating that 16% of the variance in the 1983-84 gains in CAT-Total Reading is explained by resource room status, Academic Self-Concept - Performance Based and Motivation for Schooling, operating jointly. The probability of obtaining an overall F ratio equal to 2.622 is less than .05. We may therefore conclude that it is unlikely that the sample was drawn from a population in which multiple R=0.

When entered first into the equation, resource room accounts for 6.4% of the variance. Scores on the Academic Self-Concept - Performance Based scale and on the Motivation for Schooling scale contribute 5% and 4.7%, respectively. In comparing the F value associated with each regression coefficient (B) with the critical F for 1 and 44 df, it was found that the B's for resource room and Academic Self-Concept - Performance Based were significant at p=.05, while the B for Motivation for Schooling was not significant.

Regression analyses were also performed to study the correlation of mathematics gains with the same predictors and with the gains in CAT-Total Reading. Table XIII presents the summary of the regression on 1983-84 gains on NYCMT-Total Math, when the current 8th grade cohort was in a 7th grade Gates program in the zoned junior highs.

Table XIII

1984-85 Eighth Grade Gates Extension Cohort
Final Summary of Regression on 1983-84 Gains, NYCMT-Total Math

| | |
|---|---|
| ultiple R | 0.7330 |
| ultiple R squared | 0.5373 |
| djusted R squared | 0.4696 |
| td. Error of Est. | 7.9804 |
| onstant | 3.8585 |

| nalysis of Variance | DF | Sum of Squares | Mean Square | F Ratio | Prob. Level |
|---|---|---|---|---|---|
| egression | 6 | 3032.421 | 505.404 | 7.936 | 0.000 |
| esidual | 41 | 2611.167 | 63.687 | | |
| dj. Total | 47 | 5643.588 | | | |

| S T E P | Num vars now in | Mult R | Mult R Sq. | Change in RSq | Variable entered (* shows deleted) | B, raw coef-ficient | Stand error of B | BETA, stand. coef-ficient | Final F to delete | F when entered or deleted | Simple cor. with dep. | Partial Cor. in Final step |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0.373 | 0.139 | 0.139 | SENSE.OF.CONTROL | 0.1760 | 0.0770 | 0.3319 | 5.219 | 7.453 | 0.3734 | 0.3360 |
| 2 | 2 | 0.544 | 0.295 | 0.156 | CATT.8384 | -0.4251 | 0.1010 | -0.4538 | 17.685 | 9.989 | -0.3698 | -0.5491 |
| 3 | 3 | 0.587 | 0.344 | 0.049 | ASC.PERF.BASED | 0.4401 | 0.1137 | 0.6715 | 14.985 | 3.280 | 0.3425 | 0.5174 |
| 4 | 4 | 0.676 | 0.457 | 0.113 | ASC.REF.BASED | -0.3721 | 0.1045 | -0.5658 | 12.683 | 8.909 | 0.0484 | -0.4861 |
| 5 | 5 | 0.718 | 0.515 | 0.059 | SCHOOLS.ATTENDED | -2.7102 | 1.0152 | -0.3330 | 7.128 | 5.074 | -0.1892 | -0.3848 |
| 6 | 6 | 0.733 | 0.537 | 0.022 | LEP | 6.3727 | 4.5745 | 0.1795 | 1.941 | 1.941 | -0.1220 | 0.2126 |

egression Equation:

CMTT.8384 (pred) = .176004 SENSE.OF.CONTROL + -.425068 CATT.8384 + .440113 ASC.PERF.BASED + -.37212 ASC.REF.BASE
+ -2.71022 SCHOOLS.ATTENDED + 6.37267 LEP + 3.85848

The data in Table XIII show that $R^2$=.5373, indicating that 54% of the variation in the 1983-84 gains in NYCMT-Total Math is explained by the joint operation of: Sense of Control over Performance, 1983-84 gains in CAT-Total Reading, Academic Self-Concept - Performance Based, Academic Self-Concept - Reference Based, number of elementary schools attended and limited English proficiency. The probability of



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obtaining an overall F ratio equal or greater than 7.936 is less than .001. We may therefore conclude that it is extremely unlikely that the sample was drawn from a population in which multiple R=0.

When Sense of Control over Performance was entered first into the equation, it accounted for 13.9% of the explained variance. Entered next, the 1983-84 gains in CAT-Total Reading accounted for 15.6% of the variance. Academic Self-Concept - Performance Based and Academic Self-Concept - Reference Based accounted for 4.9% and 11.3%, respectively. When entered as the fifth variable in the equation, the number of elementary schools attended contributed .058 to the proportion of variance accounted for. Limited English proficiency, entered last, accounted for 2.2% of the variance. In comparing the F value associated with each regression coefficient (B) with the critical F for 1 and 41 df. it was found that the B's for the first five variables were significant at p=.05, while the B for limited English proficiency was not significant.

It is interesting to note that the proportion of variance accounted for in the gains in CAT-Total Reading during the 7th grade Gates program differs markedly for the 8th and 9th grade cohorts (compare Tables V and XII). Less variance is accounted for among the 8th grade cohort (16%) than among the 9th grade cohort (28%). Similarly, the proportion of variance accounted for in the gains in NYCMT-Total Math during the 7th grade Gates program differs markedly for the two cohorts (compare Tables VII and XIII). Less variance is explained among the 8th grade cohort (54%) than among the 9th grade cohort (8[illegible]%). This observation provides evidence that the 8th grade cohort is more heterogenous in performance.

The achievement and attendance data presented above for the current 8th grade Gates Extension cohort indicate that while these students showed gains in reading and math performance during the Gates program in their zoned junior high school, they also demonstrated precipitous declines in attendance. Had these students not entered the Grand Academy alternative program in fall 1984, it is anticipated that their attendance would have continued to decline and they would have undoubtedly dropped out of school. Within the first six months of the Gates Extension program, however, their declining attendance pattern was reversed, and their average daily attendance improved by approximately 14%.

## Conclusions

Findings to date indicate that nearly all students participating in the eighth grade Gates Extension program demonstrated improved attendance and sustained prior gains in reading and mathematics. During the first two years of the alternative program, students moved on to the local zoned high school for their ninth grade program. At the high school, these students maintained their improved attendance patterns but demonstrated a decline in academic performance and a resurrection of behavioral problems evidenced prior to the alternative school experience. It became evident that a longer experience in the structured yet supportive environment of the alternative program was necessary to better prepare these "double holdover" students for their next academic step and to more firmly establish their new attitudes, skills and behaviors.

The findings reported for the present 8th and 9th grade cohorts indicate that both groups made progress in reading and mathematics while they were in the 7th grade Gates program at the zoned junior high schools, but that they simultaneously demonstrated declining attendance and increased lateness. The alternative program reversed the attendance declines for both groups and maintained achievement gains. The present 9th grade cohort appears to be a more homogeneous group than the 8th grade cohort. The 8th grade cohort also presents a profile of relatively greater need.



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The findings suggest that Gates Extension students exhibit a paradoxical picture of school performance and behavior. On the one hand, they have become motivated to attend school and to project high aspirations for the future. On the other hand, they continue to lag so far behind academically that when they move out of the alternative school environment they are still unable to function effectively in the basic skills areas. Their behavior, once they leave Grand Academy, is characterized by a high rate of attendance in high school, high motivation and positive attitudes about school, and also by frequent class cutting and continued academic failure. This paradox suggests several implications for the future design of the program: (1) The traditional academic curriculum should be temporarily suspended while students receive intensive instruction in language, literacy and survival skills, utilizing content areas strictly as vehicles for engagement; and (2) Major emphasis should be placed on enabling students to make more realistic plans for the future. Those few who may be eligible for the relatively few vocational and specialized high school slots which are available should be so referred and should receive appropriate follow up services in those programs. For the majority, however, it is likely that a strong vocational preparation program with a view toward termination of traditional schooling and entrance into the world of work may be the soundest plan.

Educational Importance of the Study

The Grand Academy alternative model has demonstrated success in its initial efforts to hold high risk students in school, improve their skills and prepare them for their next academic and vocational steps. The model represents an innovative approach in its collaboration between a public school and a community based organization. The collaborative model links the public school's instructional personnel with professional supportive service and vocational service personnel of the community based organization in order to provide an integrated delivery of services to high risk students and their families. The model recognizes that retention is most often due to a complex of problems which interfere with the learning process. The strengths of both service providers are utilized to address the holistic needs of individual students and to create a favorable, success-oriented environment for students who have experienced chronic school failure.

Intervention at the junior high school level is important in order to prevent dropout in - or before - high school and subsequent difficulty in participating fully in our society. Cooperation with the community based organization has led to increased support for public education at a time when resources are strained to capacity.

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